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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,960	12/20/2004	Gunther Liebl	112740-1023	3107

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EXAMINER	
TORRES, JOSEPH D	
ART UNIT	**PAPER NUMBER**
2112	
MAIL DATE	**DELIVERY MODE**
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/518,960	LIEBL ET AL.	
	Examiner	Art Unit	
	Joseph D. Torres	2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *20-36* is/are pending in the application.

4a) Of the above claim(s) *36* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *20-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 December 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :09/06/2006,10/21/2005, 12/20/2004.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I (claims 20-35) in the reply filed on 10/29/2007 is acknowledged.

Claim 36 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/29/2007.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 20-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 recites, "A method for one of encoding and decoding", which is indefinite since it is not clear whether the Applicant is claiming a method for encoding or decoding.

Claim 20 recites, "wherein the data is respectively one of encoded and decoded", which is indefinite since it is not clear whether the data is encoded or decoded.

Claim 20 recites the term "providing that", which is indefinite.

Claim 27 recites, "wherein at least two data packets contain the identifier and are every other data packet", which is incomprehensible.

Claim 35 recites, "USP" which has no antecedent basis in the specification as required in MPEP 608.01(o).

Claims 20-35 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. Claim 20 recites, "A method for one of encoding and decoding" in the preamble. The omitted steps are: any connection the steps relating the step/limitations in claims 20-35 to a method for either encoding or decoding. Furthermore, since the term "providing that" is indefinite it is not clear that the method of claim 20 has any steps further defining any method.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 20-35 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 20-35 are directed to an abstract method fro providing an abstract data structure over a transmission channel.

The claims as written attempt to gain a patent on every "substantial practical application" of an abstract algorithm/idea for generating an abstract data structure. The courts have also held that a claim may not preempt< ideas, laws of nature or natural phenomena. The concern over preemption was expressed as early as 1852. See Le Roy v. Tatham, 55 U.S. 156, 175 (1852) ("A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right."); Funk Brothers Seed Co. v. Kalo Inoculant Co., 333 U.S. 127, 132, 76 USPQ 280, 282 (1948) (combination of six species of bacteria held to be nonstatutory subject matter).

**>Accordingly, one may not patent every "substantial practical application" of an idea, law of nature or natural phenomena because such a patent would "in practical effect be a patent on the [idea, law of nature or natural phenomena] itself." Gottschalk v. Benson, 409 U.S. 63, 71-72, 175 USPQ 673, 676 (1972).

Claim Rejections - 35 USC § 102/103

Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103, expressed as a 102/103 rejection. "There is nothing inconsistent in concurrent rejections for obviousness under 35 U.S.C. 103 and for anticipation under 35 U.S.C. 102." In re Best, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA 1977). This same rationale should

also apply to product, apparatus, and process claims claimed in terms of function, property or characteristic. Therefore, a 35 U.S.C. 102/103 rejection is appropriate for these types of claims as well as for composition claims.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 20-35, are rejected under 35 U.S.C. 102(b) as being anticipated by the AVD-2060 document (AVD-2060, Generic erasure protection with in-band signaling of protection profiles [enhanced APC-1992], March 5 - 9, 2001, pages 1-17) [hereafter

referred to as AVD-2060] and Schulzrinne et al. (H. Schulzrinne, S. Casner, R. Frederick, V. Jacobson, RTP: A Transport Protocol for Real-Time Applications, January 1996, pages 1-75) [hereafter referred to as Schulzrinne] {Note: the Schulzrinne document is a teaching reference on the RTP Protocol taught in AVD-2060}.

Claims 20-35, are rejected under 35 U.S.C. 103(a) as being unpatentable over the AVD-2060 document (AVD-2060, Generic erasure protection with in-band signaling of protection profiles [enhanced APC-1992], March 5 - 9, 2001, pages 1-17) [hereafter referred to as AVD-2060] in view of Schulzrinne et al. (H. Schulzrinne, S. Casner, R. Frederick, V. Jacobson, RTP: A Transport Protocol for Real-Time Applications, January 1996, pages 1-75) [hereafter referred to as Schulzrinne].

35 U.S.C. 102(b)/103(a) rejection of claim 20.

AVD-2060 teaches providing that a portion of the sequence of digital data corresponds to a data block (page 2, section 1.4 of AVD-2060 teaches that message blocks are broken up into transmission segments, Section 5 on page 8 of AVD-2060 teaches the use of Transmission Blocks TB to which the message blocks are mapped for transmitting); providing that the data block include a plurality of data packets (the last paragraph on page 8 of AVD-2060 teaches that each column of a Transmission Block TB is an RTP packet); providing that the data packets contain an identifier, with a position of each respective data packet within the associated data block being determined based on the identifier (the last paragraph on page 8 of AVD-2060 teaches that each RTP packet includes a sequence number in the header of the RTP packet);

providing that the data packets contain information relating to a width of the data block (the last paragraph on page 8 of AVD-2060 teaches that each RTP packet includes a UXP header repeating the block length of the TB); providing that at least one data packet per data block contains the identifier and at least one further data packet contains the information relating to the width of the data block (the last paragraph on page 8 of AVD-2060); and transmitting, alternately, the identifier and the information relating to the width of the data block according to a predefinable repetition pattern, in a data field (the last paragraph on page 8 of AVD-2060), wherein the data is respectively one of encoded and decoded in consideration of the identifier (page 10 and 11 of AVD-2060 provide coding and decoding rules for the TBs).

Note: section 5.1 of Schulzrinne teaches that a sequence number in the RTP header is a number that increments by 1 in the order that the RTP packets are transmitted. The sequence number is a clear indication of the position of the RTP packet in the transmission block.

Since Schulzrinne teaches that which is inherent in the RTP packets taught in AVD-2060, it would be obvious to use the sequence numbers as taught in Schulzrinne so that in order to comply with the RTP protocol taught in both Schulzrinne and AVD-2060.

35 U.S.C. 102(b)/103(a) rejection of claim 21.

Note: section 5.1 of Schulzrinne teaches that a sequence number in the RTP header is a number that **progressively** increments by 1 in the order that the RTP packets are

transmitted. The sequence number is a clear indication of the position of the RTP packet in the transmission block.

35 U.S.C. 102(b)/103(a) rejection of claim 22.

Section 4.1 on page 7 in AVD-2060.

35 U.S.C. 102(b)/103(a) rejection of claim 23.

Section 3 on page 6 in AVD-2060.

35 U.S.C. 102(b)/103(a) rejection of claim 24.

Note: section 5.1 of Schulzrinne teaches that a sequence number in the RTP header is a number that **progressively** increments by 1 in the order that the RTP packets are transmitted. The sequence number is a clear indication of the position of the RTP packet in the transmission block.

Section 4.1 on page 7 in AVD-2060 teaches that synchronization is achieved at the frame and group level, which clearly indicates once synchronization is achieved, the only mechanism fro detection start and end of a block is the sequence number/packet identifier.

35 U.S.C. 102(b)/103(a) rejection of claim 25.

Note: section 5.1 of Schulzrinne teaches that a sequence number in the RTP header is a number that **progressively** increments by 1 in the order that the RTP packets are

transmitted. The sequence number is a clear indication of the position of the RTP packet in the transmission block.

Since the identifiers are in every RTP packet they are also in every n^{th} packet, hence every n^{th} packet receives an identifier.

35 U.S.C. 102(b)/103(a) rejection of claim 26.

Note: section 5.1 of Schulzrinne teaches that a sequence number in the RTP header is a number that **progressively** increments by 1 in the order that the RTP packets are transmitted. The sequence number is a clear indication of the position of the RTP packet in the transmission block.

Since the identifiers are in every RTP packet they are also in every n^{th} packet, hence every n^{th} packet receives an identifier.

The last paragraph on page 8 of AVD-2060 teaches that each RTP packet includes a UXP header repeating the block length of the TB.

35 U.S.C. 102(b)/103(a) rejection of claim 27.

Note: section 5.1 of Schulzrinne teaches that a sequence number in the RTP header is a number that **progressively** increments by 1 in the order that the RTP packets are transmitted. The sequence number is a clear indication of the position of the RTP packet in the transmission block.

Since the identifiers are in every RTP packet they are also in every other packet or any two packets.

35 U.S.C. 102(b)/103(a) rejection of claim 28.

1.28 on page 4 of AVD-2060.

35 U.S.C. 102(b)/103(a) rejection of claim 29.

Section 6.1 in page 12 of AVD-2060 teaches the use of a time stamp TS to distinguish a sequence of Transmission Blocks since the TS is the same for each RTP packet in a particular transmission block in a sequence of Transmission Blocks.

35 U.S.C. 102(b)/103(a) rejection of claim 30.

Section 6.1 in page 12 of AVD-2060 teaches the use of a time stamp TS to distinguish a sequence of Transmission Blocks since the TS is the same for each RTP packet in a particular transmission block in a sequence of Transmission Blocks. Section 6.1 in page 12 of AVD-2060 teaches the use of a time stamp TS eliminates the confusion in repeating RTP sequence numbers since the RTP sequence number along with the Time Stamp determines the transmission block data.

35 U.S.C. 102(b)/103(a) rejection of claim 31.

Section 6.1 in page 12 of AVD-2060.

35 U.S.C. 102(b)/103(a) rejection of claims 32 and 33.

The last paragraph on page 8 of AVD-2060 teaches that each RTP packet includes a sequence number in the header of the RTP packet. Note: section 5.1 of Schulzrinne teaches that a sequence number in the RTP header is a number that **progressively** increments by 1 in the order that the RTP packets are transmitted.

35 U.S.C. 102(b)/103(a) rejection of claims 34 and 35.

Section 5 in page 8 and Section 1.17 on page 3 of AVD-2060.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (571) 272-3829. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on (571) 272-6962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joseph D. Torres, PhD
Primary Examiner
Art Unit 2112